

Coaxial 1W 0° 4-Way Power Divider DC-70GHz



Product Description

RFLT4WDC70G is 4-Way power divider with a frequency range of DC to 70GHz.

The forward power handling of this power divider is 1W. The Insertion Loss is 15dB with a typical isolation of 12dB.

The working temperature of this product is between - 40°C and + 85°C.

Features

- High power handling up to 1W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss

Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

Electrical Specifications, TA = +25°C

Parameter		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Units
Frequency Range		DC		26.5	26.5		67	67		70	GHz
Insertion Loss			14	15		15	17		15		dB
Isolation			10.5			12			13		dB
Input VSWR			1.3	1.6		1.7	2.0		1.7		: 1
Output VSWR			2.0	2.5		2.2	3.0		2.2		: 1
Amplitude Imbalance			±0.4	±0.5		±0.5	±0.6		±0.8		dB
Phase Imbalance			±4	±6		±7	±12		±10		deg
Power Rating	Forward Power					1					W
	Peak Power					10 (10% Duty Cycle, 1 us Pulse Width)					W
Weight						0.09Max.					lbs
Impedance						50					Ω
Input / Output Connectors						1.85mm-Female(Input) – 1.85mm-Female(Output)					
Package						Epoxy Sealed (Standard)					
						Hermetically Sealed (Optional)					

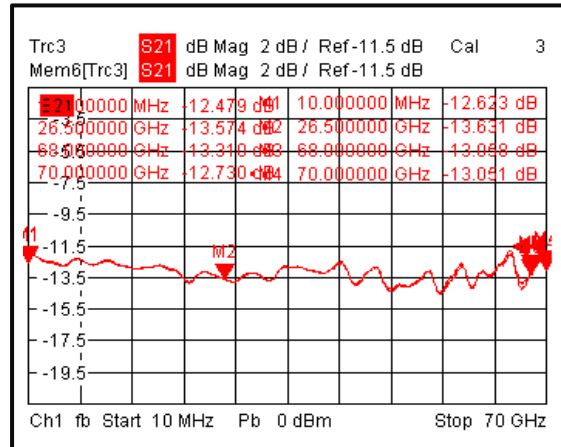
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-50°C to +105°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
*Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883 (For Hermetically Sealed Units)

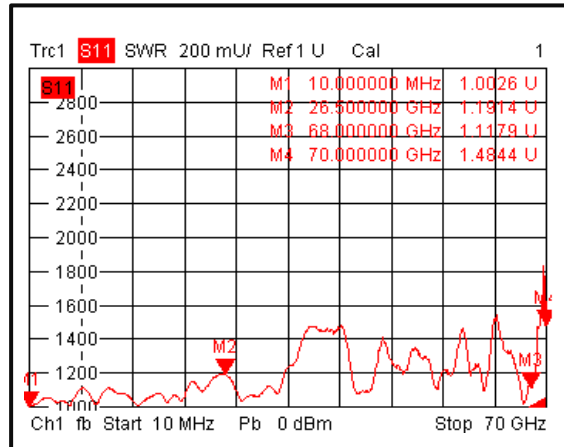
*For vibration testing details please see additional information section.

Typical Performance Plots

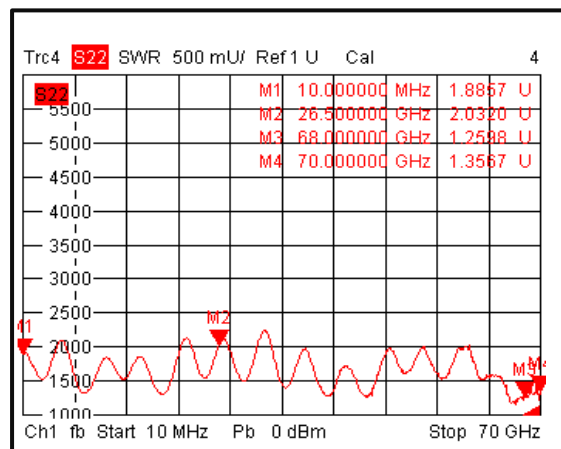
Loss & Amplitude Imbalance



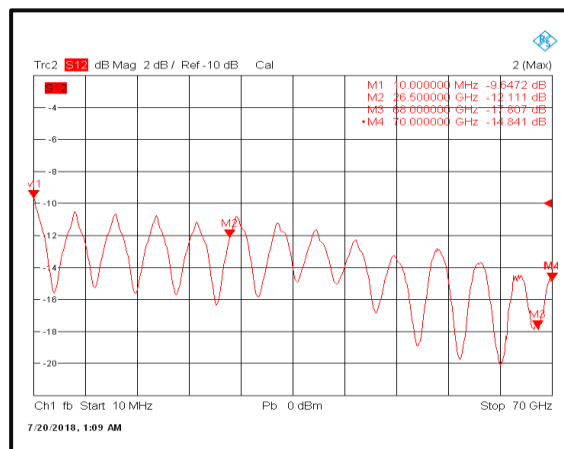
Input VSWR



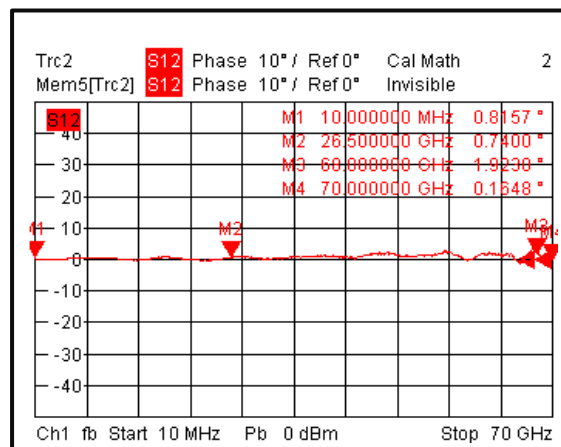
Output VSWR



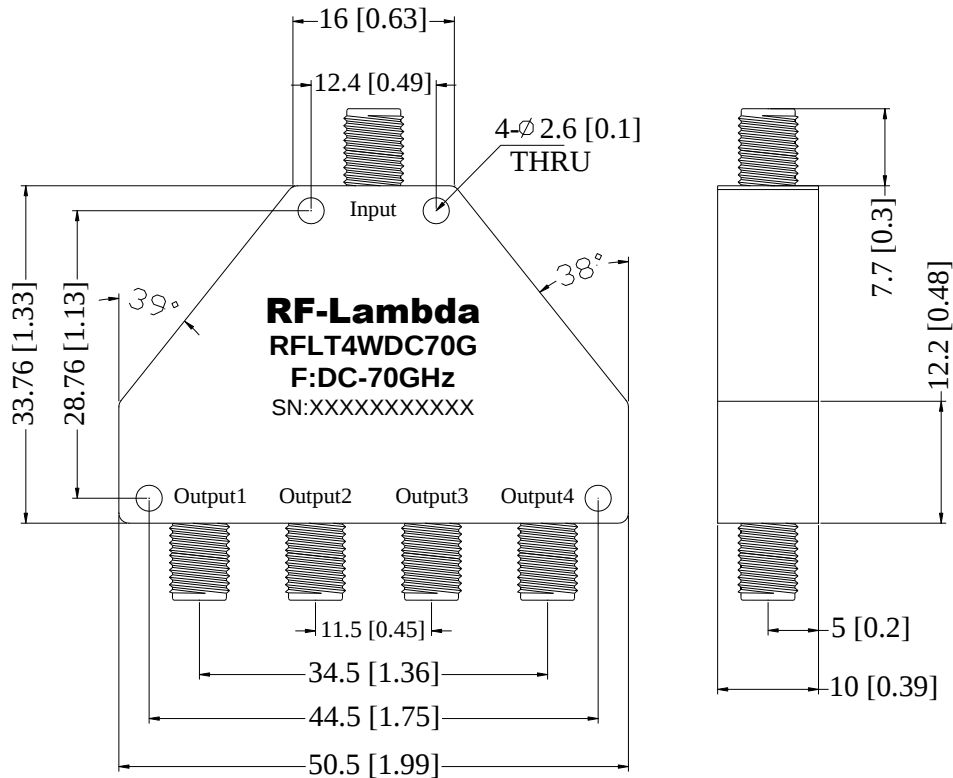
Isolation



Phase Imbalance

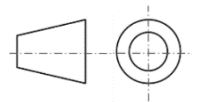


Outline Drawing



Notes:

1. Package Material: Aluminum
2. Finish: Nickel Plated
3. All dimensions are in millimeters [inches].
4. Outline Tolerances ± 0.25 [0.01], Mounting Hole Tolerances ± 0.1 [0.004] unless otherwise specified.
5. Standard torque wrench must be used to secure RF connectors.



Additional Information

Documentation

Connector Torque Specifications

https://www.rflambda.com/pdf/Torque_Specifications.pdf

Random Vibration Test Standard

https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Webpage

Ordering Information

Part Number	Modification	Description
RFLT4WDC70G	Connectors 1.85mm-Female	DC-70GHz 4-Way Power Divider

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